MEMORANDUM OF UNDERSTANDING BETWEEN THE AMERICAN SOCIETY OF CIVIL ENGINEERS AND THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

INTRODUCTION

This Memorandum of Understanding (MOU) is entered into by and between the American Society of Civil Engineers (hereinafter referred to as ASCE) and the National Oceanic and Atmospheric Administration (hereinafter referred to as NOAA). ASCE and NOAA may hereinafter be referred to individually as "party," and collectively as "parties."

I. BACKGROUND

ASCE and NOAA share a common goal of making the Nation's infrastructure resilient to the current and future risks of climate change. Pursuant to this shared goal, ASCE and NOAA have recognized the opportunity to work together to leverage NOAA's climate expertise and resources to better provide the civil engineering community with the information it requires to plan, design, and operate climate-resilient and sustainable infrastructure. As such, ASCE and NOAA have already undertaken a range of existing activities in an aligned manner, including, for example:

- Exploring actions to bridge the gap between climate science and engineering, domestically
 - and internationally, through NOAA's Climate Program Office;
- Collaborating on wind speed estimation in tornadoes, application of radar rainfall data, surveying and geomatics engineering, and natural and nature-based approaches for coastal resilience;
- Having three NOAA employees serve in ASCE leadership roles on two ASCE Institutes' Governing Boards and numerous other NOAA employees participate in ASCE committees;
- Advancing discussions through NOAA's listening sessions with the civil engineering community, in which ASCE actively participated; and
- Working to jointly host technical workshops to provide a forum for expert-to-expert discussions on technical areas of mutual interest to ASCE and NOAA, including discussions pertaining to ASCE's climate information needs (data, observations, future projections) for

codes and standards processes, as well as manuals of practice.

In recognition of the merit and value of these existing aligned activities, ASCE and NOAA leadership jointly determined there is mutual benefit in a formalized relationship that would

support the goals of each organization. Thus, this MOU serves to support further collaboration between ASCE and NOAA.

II. PARTIES

NOAA is a science-based Federal agency within the Department of Commerce with regulatory, operational, and information service responsibilities with a presence in every U.S. state and territory. Through its long-standing mission of science, service, and stewardship, NOAA generates tremendous value for the Nation – and the world – by advancing our understanding of and ability to anticipate changes in the Earth's environment by improving society's ability to make scientifically informed decisions and by conserving and managing ocean, coastal, and Great Lakes' resources.

ASCE is a 501(c)(3) non-profit, educational, and scientific organization that is the repository of technical information for the profession of civil engineering within the United States. Founded in 1852 and headquartered in Reston, Virginia, ASCE represents more than 150,000 members of the civil engineering profession worldwide and is America's oldest national engineering society (<u>www.asce.org</u>). In fulfilling its mission, ASCE is a major publishing outlet in the advancement, development, and communication of engineering methodologies on an international basis.

Through the expertise of its active membership, ASCE is a leading provider of technical and professional conferences and continuing education; is the world's largest publisher of civil engineering content; and is an authoritative source for codes and standards that protect the public. ASCE advances civil engineering technical specialties through its technical institutes. ASCE is committed to advancing the knowledge and improving the understanding of relevant sciences, improving civil engineering practices, and partnering with national and international organizations.

III. PURPOSE

Acknowledging the shared values of both organizations, this MOU is designed to identify opportunities for collaboration and articulate actions to achieve common goals, including to:

- 1. Improve cooperation in developing and delivering climate information and services required by civil engineering and allied professionals in order for them to design, build, operate, and maintain climate-resilient infrastructure.
- 2. Facilitate ASCE's efforts to update its published and educational content to reflect the best available climate information.

This MOU will benefit NOAA by providing a direct communication pathway to engineers and allied professionals. It will assist NOAA in providing quality climate information and services to be used by professionals responsible for delivering climate-resilient and sustainable infrastructure.

This MOU will benefit ASCE by providing a more direct channel to NOAA climate information and services required by the engineering and scientific community it represents.

This MOU will benefit both organizations by strengthening interactions and information-sharing pertaining to the development of engineering standards published by ASCE and dissemination of NOAA climate information and services.

Notwithstanding anything to the contrary contained elsewhere in this MOU, no legally binding obligations shall be created by this MOU. No legally binding obligations shall be created between the parties unless subsequent agreements are executed and those executed agreements expressly include obligations that are legally binding.

IV. PRINCIPLES

- A. ASCE will:
 - 1. Upon request, and to the extent consistent with Federal law, assist NOAA with identifying the science and services required by the civil engineering community, including facilitating public comments from a broad community of its members and allied organizations.
 - 2. Upon request, assist with communication efforts to the ASCE community. This will be accomplished by transmitting relevant information to established ASCE technical committees, communities, and affiliated organizations.
 - 3. Act as an information conduit to its membership regarding climate information and services, engineering and scientific information, educational opportunities, and other applicable, related information regarding engineering work and tools and resources publicly available to them.
- B. NOAA will:
 - 1. Advise ASCE of opportunities to engage in updating and disseminating climate and technical information.
 - 2. Characterize and facilitate access to publicly available observations, data, projections, and other scientific information that ASCE considers relevant to inform climate-resilient and sustainable infrastructure, including from programs pertaining to earth system science, climate modeling, earth system observing, and climate tool and service development across all relevant NOAA Line Offices.
 - 3. Assist in identifying and coordinating opportunities for NOAA climate scientists and other appropriate subject matter experts to engage with civil engineers (including ASCE engineering experts), as well as opportunities to

facilitate distribution of publicly available NOAA information within the existing ASCE technical communities.

- C. In addition to the general commitments set forth above, it is agreed upon that both parties may:
 - 1. Meet at least annually, or as requested by either party, to discuss ASCE and NOAA programs and priorities, to review progress and discuss methods of improving processes related to implementation of this MOU. The opportunities for a meeting(s) may include, without limitation, ASCE Conferences, where NOAA will have opportunities for presentations.
 - 2. Where appropriate, share or jointly develop education and outreach materials, best practices, or tools including, but not limited to, websites, video archiving, or data management.
 - 3. Jointly prepare each year or as needed, a plan of activities to improve communication and coordination and to use as guidance for subsequent joint activities.

Additional activities to be undertaken by the parties pursuant to this MOU may be set forth in a written statement of work executed between the parties.

V. GENERAL PROVISIONS

This MOU takes effect upon the signature of the parties and will remain in effect for 5 years from the date of execution, unless extended by mutual agreement of the parties or unless earlier terminated as provided herein. Either party(s), in writing, may terminate this MOU with a 30-day written notice to the other. This MOU may not be modified, changed, extended, or otherwise amended except pursuant to a written agreement signed by the parties hereto.

This MOU is not intended to, and does not create, any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity, by a party against the United States, its agencies, its officers, or any person.

The parties and their respective officers will handle their own activities and utilize their own resources, including expenditures of their own funds, in pursuing the purposes of this MOU. Each party will carry out its separate activities in a coordinated and mutually beneficial manner.

The parties and their respective officers will be responsible for its own acts and results thereof and will not be responsible for the acts of the other party and their results thereof. Each party therefore assumes all risk and liability to itself, its agents, or employees for any injury to persons or property resulting in any manner from the conduct of its agents or employees under this MOU, and for any loss, cost, damage, or expense resulting at any time from failure to exercise proper precautions, of or by itself or its own agents or employees, while occupying or visiting the projects under and pursuant to this MOU. The Federal Government's liability will be governed by the provisions of the Federal Tort Claims Act (28 U.S.C. §§ 2671-80). This MOU is neither a fiscal nor a funds obligation document. Any endeavor, including specific work projects or activities where there is to be reimbursement or contribution of funds between the parties to this instrument, will be handled in accordance with applicable laws, regulations, and procedures including those for Government procurement and printing. Such endeavors and work plans will be made in writing in a separate and independent agreement by representatives of the participating programs, authorized by appropriate statutory authority. This MOU does not provide such authority. Specifically, this MOU does not establish authority for a noncompetitive award to the cooperator of any contract or other agreement. Negotiation, execution, and administration of each such agreement must comply with all applicable statutes and regulations.

Any contract or agreement for training or other services must fully comply with all applicable requirements for competition.

Should disagreements arise on the interpretation of the provisions of this agreement or amendments and/or revisions thereto, that cannot be resolved at the operating level, the areas(s) of disagreement shall be stated in writing by each party and presented to the other party for consideration. If agreement or interpretation is not reached within 30 days, the parties shall forward the written presentation of the disagreement to respective higher officials for appropriate resolution.

VI. CONTACTS

- A. American Society of Civil Engineers: Brian Parsons, M.ASCE, ENV SP Managing Director, ASCE Environmental and Water Resources Institute Chief Sustainability Officer 1801 Alexander Bell Drive Reston, VA 20191 Telephone: (703) 295-6071 Email: <u>bparsons@asce.org</u>
- B. National Oceanic and Atmospheric Administration: Benjamin J. DeAngelo Deputy Director NOAA Oceanic and Atmospheric Research Climate Program Office Mobile: (240) 750-8243 Email: <u>ben.deangelo@noaa.gov</u>

VII. AUTHORITY

The authority for NOAA to enter into this MOU and conduct these activities is the Coast and Geodetic Survey Act, specifically:

- 1. 33 U.S.C. § 883d, which authorizes NOAA to conduct investigations and research in geophysical sciences.
- 2. 33 U.S.C. § 883e, which authorizes NOAA to enter into agreements with any public or private organization for surveys or investigations authorized by the Act, or for the preparation and publication of the results thereof, and to establish the terms of any agreement entered into under the Act.

VIII. TERMS AND CONDITIONS

NOAA's participation in this MOU is subject to the availability of appropriations, as well as applicable NOAA and Department of Commerce policies and procedures.

IX. APPROVAL

The undersigned parties hereby agree to the terms and conditions specified above.

Thomas W. Smith III, CAE, ENV SP, CAE, F.ASCE Executive Director American Society of Civil Engineers Date

Richard W. Spinrad, Ph.D. Under Secretary of Commerce for Oceans and Atmosphere and NOAA Administrator Date